

Case 2725

***Holostaspis subbadius* var. *robustus* Berlese, 1904 (currently *Macrocheles robustulus*; Arachnida, Acarina): proposed conservation as the correct spelling of the specific name**

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Abstract. The purpose of this application is to conserve the widely used name *Macrocheles robustulus* (Berlese, 1904) for a mite of probable health importance. The specific name was originally published as *rubustus*, presumably as a typographical error, but that spelling has not been used for over 30 years and then only by one author.

1. Berlese (1904) described a new species of mite, *Holostaspis subbadius*. He simultaneously described two new varieties of this species, var. *scutatus* and var. *robustus* (p. 264). The name *rubustus* is spelt only once in this paper and was not subsequently used by Berlese either with this spelling or as *robustus*.

2. The spelling *rubustus* has been used in published works by only one other author (Sellnick, 1940, p. 84; 1958, p. 23) and in both papers is attributed to Berlese, 1904. In point of fact, Sellnick misapplied the name to a different species (*Macrocheles matrius* Hull, 1925) as pointed out by Krauss (1970, p. 18). The spelling *rubustus* has not been used since 1958.

3. The three taxa described by Berlese are currently referred to the genus *Macrocheles* Latreille, 1829, as *Macrocheles subbadius*, *M. scutatus* and *M. robustulus* (sic). The species described as *rubustus* has also been referred to as *Macrocheles subbadius* var. *robustus* and *M. robustulus*. The spelling *robustus* has been used in at least 35 papers from Leitner (1946, p. 85) onwards. The modern concept of the synonymy of this species dates from Axtell (1961, p. 748). Since that time the name *robustus* has achieved widespread international usage. The name has been used by authors from U.S.A. (e.g. Axtell, 1961, p. 748; 1963, p. 628), Italy (e.g. Filipponi & Pegazzano, 1962, p. 230; Cicolani, 1979, p. 171), Israel (Costa, 1966, p. 532), Germany (Krauss, 1970, p. 18), Mexico (Halfiter & Matthews, 1971, p. 160), India (Prasad, 1974, p. 155), U.S.S.R. (Bregetova, 1977, p. 374), New Zealand (Emberson, 1980, p. 136), U.K. (Luxton, 1982, p. 577; Hyatt & Emberson, 1988, p. 106) and Australia (Wallace, 1986, p. 11).

4. The mite species in question is believed to be of health importance. It is a predator which occurs in accumulations of dung, where it contributes to the biological control of the housefly *Musca domestica* (e.g. Axtell, 1961, 1963, 1969; Filipponi, 1964). For this reason it has been the subject of a variety of ecological and laboratory studies (e.g. Axtell, 1961; Filipponi, 1964; Filipponi & Mosna, 1968; Cicolani, 1979; Halliday & Holm, 1987).

5. The type specimen of *rubustulus* (slide number 19/18) is in the Berlese Acaroteca, Florence, and is labelled *robustulus* in Berlese's handwriting. The same is true of two other slides (201/45 and 201/46) and two alcohol vials (38°/1873 and 38°/1874) (F. Pegazzano, personal communication, 1989). The name *rubustulus* was never used anywhere else in Berlese's considerable acarological canon. No material bearing this name is known to exist in his collection (Castagnoli & Pegazzano, 1985); on the other hand, a number of Berlese species names have the stem *robust-*. It appears that the spelling *rubustulus* in Berlese's 1904 paper was a typographical error. However, this spelling cannot be treated as an incorrect original spelling since the evidence for this is not to be found 'in the original publication itself, without recourse to any external source of information' (Article 32c of the Code).

6. Under a strict interpretation of Article 33c, all usage of the name *robustulus* should be regarded as incorrect subsequent spelling. However, this spelling has achieved extensive and exclusive usage since 1958 and to revert to the original spelling would cause needless confusion and would not be in the interests of stability of nomenclature.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that the specific name *rubustulus* Berlese, 1904, as published in the trinomen *Holostaspis subbadius* var. *rubustulus*, is to be treated as an incorrect original spelling of the name *robustulus*;
- (2) to place on the Official List of Specific Names in Zoology the name *robustulus*, as a correction of *rubustulus* Berlese, 1904, as published in the trinomen *Holostaspis subbadius* var. *rubustulus*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *rubustulus* Berlese, 1904, as published in the trinomen *Holostaspis subbadius* var. *rubustulus*, and as ruled in (1) above to be treated as an incorrect original spelling of *robustulus*.

Acknowledgement

I would like to thank Drs F. Pegazzano, R. C. Axtell and K. H. L. Key for providing valuable assistance in the preparation of this case.

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